A

A-Ar interval, Dec. 827–829
Ablation
  atrioventricular junction, catheter placement for, July 445
  in tachycardia (*see* Tachycardia, ablation in)
Acetylcholine: and coronary atherosclerosis, Aug. 495
Adenine: structural formula, Jan. 25
Adenocarcinoma: gastric, metastatic, to pericardium, Feb. 101
Adenosine: in tachycardia, supraventricular paroxysmal, July 452
Adrenergic receptor blockers: beta-, in vasodepressor syncope, Apr. 225–226
Age
  in beta-blocker trials, and mortality, Oct. 636–637
  cardiovascular heart disease and, from Framingham Study, Oct. 628
  thrombolytic trials and mortality, Oct. 635
Aged
  angina in, Oct. 631–633
  antihypertensives for, physiologic impact and cost, Oct. 662
  aortic regurgitation in, Oct. 649
  aortic stenosis, Oct. 645–648
  arrhythmia in, Oct. 670–671
  cardiomyopathy, Oct. 661–668
  cardiovascular disease in, Oct. 615–690
    clinical care, objectives and goals of, Oct. 616–618
  coronary artery bypass in, Oct. 641–644
  demography of, Oct. 615–616
  drug disposition in, factors affecting, Oct. 624
  endocarditis in, infective, Oct. 668–669
  heart disease in
    congenital, Oct. 668
    coronary (*see* Heart disease, coronary, in aged)
    pulmonary, Oct. 672
  heart failure, Oct. 661–668
  heart patients, noncardiac surgery in, Oct. 672–675
  hyperlipidemia in, Sept. 588–590
  hypertension (*see* Hypertension in aged)
  ischemia in, silent, Oct. 631–633
  mitral valve disease in, Oct. 649–651
  myocardial infarction in, Oct. 633–639
  pacemaker implant, Oct. 669–670
  PTCA in, Oct. 639–641
  pulmonary embolism in, Oct. 671–672
  rehabilitation of, Mar. 194–195
  syncope in, Apr. 217, Oct. 669–670
  valve disease in, Oct. 645–651
Aging
  cardiac pharmacotherapeutic considerations with, Oct. 622–625
  cardiovascular system changes with, anatomic and physiologic, Oct. 618–622
  heart failure and, diastolic, Dec. 812
Amyloidosis, heart
  heart failure in, diastolic, Dec. 813
  stages based on diastolic function, Dec. 813
Angina
  in aged, Oct. 631–633
  pectoris
    isosorbide dinitrate in, tolerance to, Aug. 519
    nitrates and, Aug. 500, 506
    nitroglycerin patch to avoid tolerance in, Aug. 520

A

A-Ar interval, Dec. 827–829
Ablation
  atrioventricular junction, catheter placement for, July 445
  in tachycardia (*see* Tachycardia, ablation in)
Acetylcholine: and coronary atherosclerosis, Aug. 495
Adenine: structural formula, Jan. 25
Adenocarcinoma: gastric, metastatic, to pericardium, Feb. 101
Adenosine: in tachycardia, supraventricular paroxysmal, July 452
Adrenergic receptor blockers: beta-, in vasodepressor syncope, Apr. 225–226
Age
  in beta-blocker trials, and mortality, Oct. 636–637
  cardiovascular heart disease and, from Framingham Study, Oct. 628
  thrombolytic trials and mortality, Oct. 635
Aged
  angina in, Oct. 631–633
  antihypertensives for, physiologic impact and cost, Oct. 662
  aortic regurgitation in, Oct. 649
  aortic stenosis, Oct. 645–648
  arrhythmia in, Oct. 670–671
  cardiomyopathy, Oct. 661–668
  cardiovascular disease in, Oct. 615–690
    clinical care, objectives and goals of, Oct. 616–618
  coronary artery bypass in, Oct. 641–644
  demography of, Oct. 615–616
  drug disposition in, factors affecting, Oct. 624
  endocarditis in, infective, Oct. 668–669
  heart disease in
    congenital, Oct. 668
    coronary (*see* Heart disease, coronary, in aged)
    pulmonary, Oct. 672
  heart failure, Oct. 661–668
  heart patients, noncardiac surgery in, Oct. 672–675
  hyperlipidemia in, Sept. 588–590
  hypertension (*see* Hypertension in aged)
  ischemia in, silent, Oct. 631–633
  mitral valve disease in, Oct. 649–651
  myocardial infarction in, Oct. 633–639
  pacemaker implant, Oct. 669–670
  PTCA in, Oct. 639–641
  pulmonary embolism in, Oct. 671–672
  rehabilitation of, Mar. 194–195
  syncope in, Apr. 217, Oct. 669–670
  valve disease in, Oct. 645–651
Aging
  cardiac pharmacotherapeutic considerations with, Oct. 622–625
  cardiovascular system changes with, anatomic and physiologic, Oct. 618–622
  heart failure and, diastolic, Dec. 812
Amyloidosis, heart
  heart failure in, diastolic, Dec. 813
  stages based on diastolic function, Dec. 813
Angina
  in aged, Oct. 631–633
  pectoris
    isosorbide dinitrate in, tolerance to, Aug. 519
    nitrates and, Aug. 500, 506
    nitroglycerin patch to avoid tolerance in, Aug. 520

stable, nitrates in, Aug. 527–529
action mechanism, Aug. 528–529
acute attacks, Aug. 527
combination, Aug. 525–526
long-acting, selection guidelines, Aug. 529
patient selection for, Aug. 528
prevention of attacks, Aug. 527–528
unstable, nitrates in, Aug. 529–531
action mechanism, Aug. 530–531
heparin interaction, Aug. 531
how to use, Aug. 531
Angiocardiography: radionuclide, in sudden cardiac death, Nov. 717–718
Angiography
complications in CASS patients, Oct. 631
in coronary artery disease, stable, with exercise test, Mar. 162–163
digital subtraction, of atrial myxoma, Feb. 89
radionuclide, of time-activity curve over LV, Dec. 831
Angioplasty
coronary
in aged, Oct. 639–641
indications for, Oct. 640
PTCA (*see* PTCA), Mar. 163
Angiosarcoma
atrial, Feb. 88
of heart, treatment, Feb. 118
Antiarrhythmics
in atrial fibrillation and flutter, July 440
in tachycardia, supraventricular, paroxysmal, July 451
Anticholinergic agents: in vasodepressor syncope, Apr. 226
Anticoagulation: in atrial fibrillation, July 442
Antihypertensives: in aged, physiologic impact and cost, Oct. 662
Antiplatelet activity: and nitrates, Aug. 498–500
Aortic
prosthetic valve, echocardiography of, May 291–293, 299–301
transesophageal, May 308
regurgitation in aged, Oct. 649
root movement, Dec. 829
stenosis in aged, Oct. 645–648
Arrhythmia
ablation of (*see* Tachycardia, ablation in)
in aged, Oct. 670–671
atrial, pharmacologic management, chronic, July 441–444
drugs in
actions and indications, July 427
in tachycardia (*see* Tachycardia, drugs in)
mechanisms, July 416–420
sudden death from, unusual causes, Nov. 714
in syncope (*see* Syncope, arrhythmic)
ventricular
exercise-induced, Mar. 163–165
inducibility in sudden death survivors, Nov. 732
rehabilitation in, Mar. 190–193
Arteries
coronary (*see* Coronary artery)
pressure after nitroglycerin, Aug. 503
Arteriography: coronary, of atrial myxoma, Feb. 88
Atherosclerosis
coronary (*see* Coronary atherosclerosis)
hypercholesterolemia as risk factor for, Sept. 551–554
Athletes: sudden death in, Nov. 713
Atrial
angiosarcoma, Feb. 88
arrhythmia, pharmacologic management, chronic, July 441–444
contraction
contribution to left ventricular filling, Oct. 620
prematurely placed, Dec. 823

Atrial *(cont.)*
contribution to left ventricular filling, Dec. 794
fibrillation
anticoagulation in, July 442
sustained and paroxysmal, management strategies, July 448
in syncope, Apr. 218
fibrillation and flutter
antiarrhythmics in, July 440
clinical features, July 438–439
management, clinical, July 448
nonpharmacologic therapy, July 444–447
termination, acute, July 439–440
treatment, July 438–448
flutter (*see* fibrillation and flutter *above*)
interatrial septum
hypertrophy of, lipomatous, Feb. 114
lipoma, MRI of, Feb. 96
myxoma (*see* Myxoma, atrial)
pacemaker in syncope, Apr. 216
pressure, left ventricular diastolic function and, Dec. 792
size, echocardiography in, Dec. 818
systole, Dec. 793–794
tachycardia (*see* Tachycardia, atrial)
Atrioventricular
block, Mar. 192
in near syncope, Apr. 242
with syncope, Apr. 217
conduction abnormalities in syncope, Apr. 253
junction ablation, catheter placement for, July 445
junctional rhythm, Mar. 191
node
conduction curve before and after ablation, July 455
reentry supraventricular tachycardia in syncope, Apr. 255
tachycardia (*see* Tachycardia, atrioventricular)
AV (*see* Atrioventricular)

B

Becker's muscular dystrophy: in cardiomyopathy, Jan. 59–60
Beta-adrenergic receptor blockers: in vasodepressor syncope, Apr. 225–226
Beta blockade: in rehabilitation, Mar. 187–188
Beta-blocker trials: mortality by age in, Oct. 636–637
Biexponential curve fitting: in isovolumic relaxation constant, Dec. 803
Bile acid sequestrants: in hypercholesterolemia, Sept. 565–567
Biology, molecular (*see* Molecular biology)
Björk-Shiley valve, June 338–341
mitral, May 285
Bleeding (*see* Hemorrhage)
Block
atrioventricular, Mar. 192
in near syncope, Apr. 242
with syncope, Apr. 217
in syncope, Apr. 254
Blockade: beta, in rehabilitation, Mar. 187–188
Blocker: beta-adrenergic receptor, in vasodepressor syncope, Apr. 225–226
Blood
lipid control (*see* Lipid control)
pressure
in cardiovascular disease risk, from Framingham Study, Oct. 628
in exercise test, Mar. 157
high, rehabilitation and, Mar. 183–184
monitoring in rehabilitation activity, Mar. 196, 197
in syncope, Apr. 248
Blotting
Northern, Jan. 41–44
Southern (*see* Southern blotting)
Borg Scale: for rating perceived exertion, Mar. 154
Bradyarrhythmia: in syncope, Apr. 216–217

Bradykinin: and coronary artery, Aug. 496
Bronchogenic carcinoma: MRI of, Feb. 100
Bypass, coronary artery (*see* Coronary artery bypass)

C

Carcinoma
  bronchogenic, MRI of, Feb. 100
  lung, Feb. 123
Cardiac (*see* Heart)
Cardiomyopathy
  in aged, Oct. 661–668
    statistical data, Oct. 661–662
  in Becker's muscular dystrophy, Jan. 59–60
  dilated
    in aged, Oct. 667–668
    sudden cardiac death and, Nov. 705–707
  in Duchenne's dystrophy, Jan. 59–60
  hypertrophic
    in aged, Oct. 666–667
    familial, Jan. 58–59
    heart failure in, diastolic, Dec. 810–811
    sudden cardiac death and, Nov. 707–708
  mitochondrial, Jan. 61–62
  molecular techniques in, Jan. 57–63
  restrictive, in aged, Oct. 668
  X-linked, Jan. 62–63
Cardiopulmonary resuscitation: and sudden cardiac death, Nov. 739–741
Cardiovascular
  disease
    in aged, Oct. 615–690
    in aged, clinical care, objectives and goals of, Oct. 616–618
    risk by age, sex and blood pressure from Framingham Study, Oct. 628
  system with aging, anatomic and physiologic changes, Oct. 618–622
Cardioverter-defibrillator: and sudden cardiac death, Nov. 750–756
Carotid sinus
  massage and syncope, Apr. 242
  syncope, Apr. 230–231
    treatment, Apr. 231
Carpentier-Edwards valve, June 346–348, June 350
Catheter
  in atrioventricular junction ablation, July 445
  gradient, Oct. 647
  in tachycardia ablation, July 436–438
    atrioventricular nodal reentrant, July 454–457
Catheterization, cardiac: and sudden cardiac death, Nov. 729
Chest radiography: of heart tumors, Feb. 85–86
Children
  cholesterol in
    LDL, classification, Sept. 591
    total, classification of, Sept. 591
  hyperlipidemia in, Sept. 590–592
  rhabdomyoma of heart in, Feb. 116
  sudden cardiac death, Nov. 712–713
Cholesterol
  coronary heart disease death and, Sept. 554
  effect of combined drug therapy on, Sept. 577
  HDL
    low plasma concentrations, therapy of, Sept. 583–584
    reduced, causes of, Sept. 583
  in heart disease, coronary, Oct. 627
  LDL
    in children, classification, Sept. 591
    classification, Sept. 557
    effect of combined drug therapy on, Sept. 577
    treatment decisions based on, Sept. 559
  lowering diets, Mar. 178

Cholesterol *(cont.)*
plasma total, classification, Sept. 557
serum levels of men and women, Sept. 552
total, in children, classification, Sept. 591
Computed tomography: of heart tumors, Feb. 87, Feb. 92–94
Coronary
angioplasty (*see* Angioplasty, coronary)
artery
bradykinin and, Aug. 496
bypass, in aged, Oct. 641–644
bypass, mortality, Oct. 642
bypass, patients becoming symptomatic after, Mar. 163
bypass, survival after, Mar. 162–163
bypass, survivors, hospital stay duration, Oct. 642
disease, in peripheral vascular disease, Oct. 674
disease, stable, and exercise test, Mar. 162–163
atherosclerosis
and acetylcholine, Aug. 495
serotonin and, Aug. 510
with stenosis, exercise in, Aug. 509
with stenosis, nitroglycerin in, Aug. 507
heart disease (*see* Heart disease, coronary)
Cost
of antihypertensives in aged, Oct. 662
sudden cardiac death, Nov. 757
Cough syncope, Apr. 233
Counseling: in rehabilitation, Mar. 184–185
Cyst, pericardial (*see* Pericardial cyst)
Cystadenocarcinoma: pericardial metastases of, Feb. 86
Cytosine: structural formula, Jan. 25

D

Death
sudden, and syncope, Apr. 238
sudden cardiac (*see* Sudden cardiac death)
(*See also* Mortality)
Defecation syncope, Apr. 234
Defibrillator
cardioverter and sudden cardiac death, Nov. 750–756
Life-Pak 6 Physio-Control, July 430
pulses, July 430
Diabetes mellitus
heart failure in, diastolic, Dec. 812
rehabilitation and, Mar. 193–194
Diastasis, Dec. 793
Diastole
different phases, determinants of, Dec. 794
four phases of, Dec. 790
Diastolic filling: early, contribution to left ventricular filling, Oct. 620
Diet
cholesterol-lowering, Mar. 178
control in lipid control, Mar. 177–178
supplement in lipid control, Mar. 179–180
treatment of hyperlipidemia, Sept. 562–564
Digestion: and electrophoretic separation of DNA, Jan. 39–40
Digital subtraction angiography: of atrial myxoma, Feb. 89
Digoxin: in tachycardia, July 427
Disopyramide: in vasodepressor syncope, Apr. 227
Diver's syncope, Apr. 234
DNA
cloning, Jan. 44–46
double-stranded, Jan. 26
electrophoretic separation of, and digestion, Jan. 39–40
function, Jan. 28
as fundamental molecule of life, Jan. 23–26
isolation of, Jan. 38–39
recombinant, unique features of, Jan. 15
replication, Jan. 30
meiosis and, Jan. 28–31
mitosis and, Jan. 28–31

sequencing, Jan. 46–47
strand components, Jan. 24
Doppler
clues to diastolic function, Dec. 818–819
of prosthetic valve
aortic, May 291–293
mitral, May 287–289
tracings of transmitral velocity profile, Dec. 818
ultrasound of atrial myxoma, Feb. 109
Drug(s)
antiarrhythmic, actions and indications, July 427
development of drugs and in vivo structure-function analysis, Jan. 14–18
disposition in aged, factors affecting, Oct. 624
electrophysiologically guided, in sudden cardiac death, Nov. 741–745
in hypercholesterolemia (*see* Hypercholesterolemia, drugs in)
in hyperlipidemia, Sept. 551–605
combined, Sept. 578–581
in hyperlipoproteinemia, combined, Sept. 579
in hypertriglyceridemia, Sept. 581–582
lipid-lowering, Mar. 179, 180–181
potential interactions, Sept. 565
sudden cardiac death and, Nov. 736
in tachycardia (*see under* Tachycardia)
Duchenne's muscular dystrophy: in cardiomyopathy, Jan. 59–60
Dystrophy, muscular
Becker's, cardiomyopathy in, Jan. 59–60
Duchenne's, cardiomyopathy in, Jan. 59–60
myotonic, Jan. 60–61

E

Echocardiography
combined with phonocardiography in heart failure, diastolic, Dec. 826
in heart failure, diastolic, Dec. 816–829
of heart tumors, Feb. 90
of lymphangiosarcoma of heart, Feb. 119
M-mode
of atrial myxoma, Feb. 109
dual, Dec. 824
of mitral valve myxoma, Feb. 106
of pleural effusion simulating paracardiac mass, Feb. 103
of prosthetic valve (*see* Prosthetic valve, echocardiography of)
in sudden cardiac death, Nov. 717
in syncope, Apr. 243
transesophageal
of atrial myxoma, Feb. 110
of fibroelastoma of heart, papillary, Feb. 115
of mitral fibrosarcoma, Feb. 120–121
of myxoma, hemorrhagic, Feb. 108
of uterine leiomyosarcoma, Feb. 124
Economics: of sudden cardiac death, Nov. 756–759
Education: of patient and family, in rehabilitation, Mar. 184–185
Elderly (*see* Aged)
Electrical abnormalities: and sudden cardiac death, Nov. 711–712
Electrocardiography
in heart failure, diastolic, Dec. 816
of heart tumors, Feb. 85
long-term, and sudden cardiac death, Nov. 720–722
monitoring
in exercise training, Mar. 170
in rehabilitation, Mar. 169–171, 196, 197
responses during exercise test, Mar. 157–161
rhythm strip of atrial tachycardia, Apr. 217
signal-averaged
acquisition and processing of, Nov. 723
sudden cardiac death and, Nov. 722–727

Electrocardiography *(cont.)*
in syncope (*see* Syncope, ECG in)
tachycardia, supraventricular, reentrant, July 416
with telemetry in ventricular tachycardia, Mar. 191
Electrography
intracardiac, of atrioventricular nodal modification, July 456
in syncope, Apr. 254
in tachycardia, atrioventricular reciprocating, at accessory pathway ablation, July 459
Electrophysiologic studies in syncope (*see* Syncope, electrophysiologic studies in)
Electrophysiologic testing: and sudden cardiac death, Nov. 729–734
Electrophysiologically guided drugs: in sudden cardiac death, Nov. 741–745
Electrophysiology protocol, Nov. 731
Embolism
after prosthetic valve, June 368–369
rates, June 373–374, 377–380
pulmonary, in aged, Oct. 671–672
Endocarditis, infective
in aged, Oct. 668–669
echocardiography of, May 303–307
Endomyocardial fibrosis: heart failure in, diastolic, Dec. 814
Endonuclease: restriction, recognition sites, Jan. 40
Endothelium
function of nitrates, Aug. 492–496
independent vasodilators, Aug. 497–498
interactions with platelets, Aug. 494–495
Exercise
in coronary atherosclerotic stenosis, Aug. 509
dynamic vs. isometric, Mar. 173–174
intervention in lipid control, Mar. 178–179
prescriptive, general principles of, Mar. 166–167
programs, Mar. 167–175
records, Mar. 168–169
supervised, group, Mar. 167–168
supervised, screening process for, Mar. 167–168
supervised, types of, Mar. 167–169
tachycardia during, supraventricular, Apr. 219
test
abnormal responses to, Mar. 158–160
blood pressure during, Mar. 157
clinical responses to, Mar. 156–157
in coronary artery disease, stable, Mar. 162–163
graded, schedule for, Mar. 153
hemodynamic responses, Mar. 157
interpretation of, Mar. 156–157
J-junction depression during, Mar. 157–158
normal response to, Mar. 157–158
patient's appearance during, Mar. 156
physical exam during, Mar. 156
in postmyocardial infarction patients, Mar. 161–162
prognostic use of, Mar. 161–163
in PTCA, Mar. 163
R wave changes during, Mar. 160–161
rescheduling, reasons for, Mar. 151
ST segment changes during, Mar. 158–159
ST segment depression during, Mar. 159
ST segment elevation during, Mar. 159–160
ST segment elevation during, Q waves and, Mar. 160
symptoms with, Mar. 156

T wave changes during, Mar. 160
U wave changes during, Mar. 160–161
testing in rehabilitation, Mar. 149–165
in arrhythmia, Mar. 163–165
complications, Mar. 150
contraindications, Mar. 151
disability, functional classification of, Mar. 163
functional capacity, Mar. 156–157
perceived exertion, Mar. 154–155
postexercise period, Mar. 155
procedures, Mar. 149–155
procedures, physician's role in, Mar. 149–152
protocols, Mar. 152–154
regular, Mar. 169
safety measures, Mar. 152
termination, indications, absolute, Mar. 155
termination, indications, relative, Mar. 155
testing in sudden cardiac death, Nov. 718–720
testing in syncope, Apr. 244
training, Mar. 165–167
arm work vs. leg work, Mar. 174–175
cardiac output in, Mar. 165
ECG monitoring in, Mar. 170
in home, Mar. 171–173
myocardial oxygen uptake in, decrease, Mar. 165–166
oxygen uptake in, maximum, Mar. 165
protocol, Mar. 171–172
in workplace, Mar. 171–173
types of, Mar. 173–175
ventricular arrhythmia due to, Mar. 163–165
Exertion: perceived, in exercise testing in rehabilitation, Mar. 154–155
Exponential model: three-constant, in isovolumic relaxation constant, Dec. 802

F

Fibrates: in hypercholesterolemia, Sept. 573–574
Fibric acid derivatives: structure, Sept. 573
Fibrillation, atrial (*see* Atrial fibrillation)
Fibroelastoma, papillary, of heart, Feb. 115
Fibroma: of heart, treatment, Feb. 117–118
Fibrosarcoma
of heart, treatment, Feb. 120
mitral, echocardiography of, Feb. 120–121
pericardial, MRI of, Feb. 99
Fibrosis: endomyocardial, heart failure in, diastolic, Dec. 814

G

Gastric adenocarcinoma: metastatic to pericardium, Feb. 101
Gene
expression, Jan. 34–37
identification of, Jan. 55–56
isolation of, Jan. 55–56
libraries, development of, Jan. 47
regulation, Jan. 34–37
posttranscriptional, Jan. 36
posttranslational, Jan. 37
pretranscriptional, Jan. 34–35
transcriptional, Jan. 35–36
translational, Jan. 36–37
structure, Jan. 27
Genetic
information, organization of, Jan. 26–28
linkage, Jan. 53–54
Genetics
molecular (*see* Molecular genetics)
reverse, Jan. 51–53
Glycosides: cardiac, in tachycardia, July 424–425
Growth: heart, as new frontier, Jan. 21–22
Guanine: structural formula, Jan. 25

H

Hancock valve, June 345–346, May 274, 284
Heart
  aged patients, noncardiac surgery in, Oct. 672–675
  amyloidosis (*see* Amyloidosis, heart)
  angiosarcoma, treatment, Feb. 118
  arrest, survivors, Nov. 742
  death, sudden (*see* Sudden cardiac death)
  disease
    in aged, Oct. 615–690
    congenital, in aged, Oct. 668
    coronary (*see below*)
    ischemic, nitrates in, Aug. 527–535
    ischemic, sudden cardiac death and, Nov. 710–711
    pulmonary, in aged, Oct. 672
  disease, coronary
    in aged, Oct. 625–645
    in aged, diagnostic tests, Oct. 628–631
    in aged, preventive aspects, Oct. 626–628
    in aged, rehabilitation, Oct. 644–645
    in aged, statistical data, Oct. 625
    cholesterol in, Oct. 627
    death from, and cholesterol, Sept. 554
    premature, risk factors other than hypercholesterolemia, Sept. 558
  failure
    in aged, Oct. 661–668
    in aged, statistical data, Oct. 661–662
    in aged, systolic/diastolic dysfunction, Oct. 663–666
    congestive, nitrates and, Aug. 504
    congestive, transmitral flow in, Dec. 823
    diastolic (*see below*)
    progressive, mortality in, Nov. 707
    rehabilitation in, Mar. 189–190
  failure, diastolic, Dec. 787–845
    clinical presentation, Dec. 815
    definition, Dec. 787–788
    ECG in, Dec. 816
    echocardiography in, Dec. 816–829
    etiologic factors, Dec. 809–815
    hemodynamic measures, Dec. 831–833
    historical perspectives, Dec. 788–789
    incidence, Dec. 788
    laboratory diagnosis, Dec. 815–833
    pathogenesis, Dec. 809–815
    prognosis, Dec. 835–836
    radiography of, chest, Dec. 815
    radionuclide techniques, Dec. 829–831
    signs, physical, Dec. 815
    symptoms, Dec. 815
    therapeutic approaches, Dec. 833–834
  fibroelastoma, papillary, Feb. 115
  fibroma, treatment, Feb. 117–118
  fibrosarcoma, treatment, Feb. 120
  glycosides in tachycardia, July 424–425
  growth, as new frontier, Jan. 21–22
  life support and sudden cardiac death, Nov. 739–741
  lipoma, treatment, Feb. 114
  lymphangiosarcoma, echocardiography of, Feb. 119
  lymphoma, treatment, Feb. 122
  mesothelioma, treatment, Feb. 121–122
  myxoma, Feb. 105–112
  osteosarcoma, treatment, Feb. 120
  output in exercise training, Mar. 165
  pharmacotherapeutic considerations with aging, Oct. 622–625
  rate
    in exercise test, Mar. 157
    increase, mitral inflow pattern and, Dec. 824
    in syncope, Apr. 248

variability and sudden cardiac death, Nov. 727–729
rehabilitation (*see* Rehabilitation)
rhabdomyoma, treatment, Feb. 115–117
in child, Feb. 116
rhabdomyosarcoma, treatment, Feb. 118–120
sarcoma, treatment, Feb. 118
tumors, Feb. 79–137
angiocardiography of, Feb. 86–90
classification, Feb. 80
clinical pathological correlations, Feb. 105–128
CT of, Feb. 87, Feb. 92–94
diagnosis, Feb. 80–105
diagnosis, differential, Feb. 102–105
diagnosis, techniques, Feb. 82
ECG of, Feb. 85
echocardiography of, Feb. 90
echocardiography of, transesophageal, Feb. 91–92
examination of, Feb. 84
history, Feb. 82–84
manifestations, Feb. 80
MRI of, Feb. 94–102
MRI of, contrast-enhanced, Feb. 97
phonocardiography of, Feb. 84
primary, benign, treatment, Feb. 105–118
primary, classification of, Feb. 81
primary, malignant, Feb. 118–123
primary, types, proportion of, Feb. 80
radiography of, chest, Feb. 85–86
secondary, Feb. 123–128
secondary, classification of, Feb. 81
secondary, direct extension, Feb. 123
secondary, metastatic spread, Feb. 124–125
secondary, treatment, Feb. 125
secondary, venous extension, Feb. 124
secondary, venous extension, treatment, Feb. 126
treatment, Feb. 105–128
Hemorrhage after prosthetic valve, June 370–371
rates, June 383–386
Hemorrhagic myxoma: transesophageal echocardiography of, Feb. 108
Heparin: interaction with nitrates in unstable angina, Aug. 531
Hernia: hiatal, MRI of, Feb. 95
HMG CoA reductase inhibitors
in hypercholesterolemia, Sept. 569–572
hypolipidemic effects, heterozygous FH, Sept. 570
structure, Sept. 569
Hookean material: stress-strain relationship for, Dec. 798
Hybridization
in situ, Jan. 18
Southern blotting and, Jan. 43
Hypercholesterolemia
bile acid sequestrants in, Sept. 565–567
D-thyroxine in, Sept. 575–576
drugs in, Sept. 564–577
combination therapy, Sept. 576–577
combined drug regimens, efficacy of, Sept. 576
fibrates in, Sept. 573–574
HMG CoA reductase inhibitors in, Sept. 569–572
neomycin in, Sept. 575–576
nicotinic acid in, Sept. 567–569
primary, drugs for, Sept. 566
probucol in, Sept. 574–575
as risk factor for atherosclerosis, Sept. 551–554
severe, nonpharmacologic treatment, Sept. 578
workup, algorithm for, Sept. 556
Hyperlipidemia
after transplant, Sept. 586–587
causes, secondary, Sept. 561
in children, Sept. 590–592
classification, Sept. 554–562
combined, drugs in, Sept. 578–581

Hyperlipidemia *(cont.)*
diagnosis, Sept. 554–562
dietary treatment, Sept. 562–564
drugs in, Sept. 551–605
in elderly, Sept. 588–590
secondary, Sept. 585
in women, Sept. 587–588
Hyperlipoproteinemia: combined, drugs in, Sept. 579
Hypertension
in aged, Oct. 651–661
clinical trial results, Oct. 655–657
nonpharmacologic therapy, Oct. 657–658
pathophysiology, Oct. 653–654
pharmacologic therapy, Oct. 658–661
prevalence, Oct. 651
recognition, Oct. 654–655
risk characteristics, Oct. 651–653
exertional, in coronary artery disease, stable, with exercise test, Mar. 162–163
heart failure in, diastolic, Dec. 809–810
LVH and, Nov. 709–710
transmitral flow in, in aged, Dec. 821
Hypertriglyceridemia: drugs in, Sept. 581–582
Hypertrophic cardiomyopathy (*see* Cardiomyopathy, hypertrophic)
Hypertrophy
lipomatous, of interatrial septum, Feb. 114
myocardial, heart failure in, diastolic, Dec. 809
Hypotension: in syncope, Apr. 220

I

Implant: of pacemaker in aged, Oct. 669–670
Infective endocarditis (*see* Endocarditis, infective)
Interatrial septum (*see* Atrial, interatrial septum)
Intrathoracic pressure: and left ventricle, Dec. 799
Ionescu-Shiley valve, June 348–349
Ischemia
myocardial, silent, nitrates in, Aug. 531–532
silent, in aged, Oct. 631–633
Ischemic heart disease (*see* Heart disease, ischemic)
Isodinitrate
pharmacology and pharmacokinetics, Aug. 513
vs. 5-isosorbide mononitrate, Aug. 513–514
Isometric exercise, Mar. 173–174
Isosorbide dinitrate
pharmacology and pharmacokinetics, Aug. 512
rapid-onset, Aug. 522
tolerance to, in angina pectoris, Aug. 519
5-Isosorbide mononitrate
pharmacology and pharmacokinetics, Aug. 512–513
vs. isosorbide dinitrate, Aug. 513–514
Isovolumic relaxation, Dec. 790–791
constant of, Dec. 800–803
left ventricular pressure decay during, Dec. 801
time, Dec. 824

J

J-junction depression: during exercise test, Mar. 157–158

K

Kaplan-Meier mortality rate, Nov. 754

L

Laser: in tachycardia ablation, July 436–437
Leiomyosarcoma: uterine, echocardiography of, Feb. 124
Life-Pak 6 Physio-Control defibrillator, July 430

Life support: cardiac, and sudden cardiac death, Nov. 739–741
Lipid control, Mar. 175–183
  definition of, Mar. 177
  dietary control in, Mar. 177–178
  dietary supplement in, Mar. 179–180
  management strategies, Mar. 177
  treatment follow-up, Mar. 181–182
  trials supporting benefits of, Mar. 176
Lipid lowering drugs, Mar. 179, 180–181
  potential interactions of, Sept. 565
Lipoma
  of heart, treatment, Feb. 114
  of interatrial septum, MRI of, Feb. 96
Lipomatous hypertrophy: of interatrial septum, Feb. 114
Long QT syndrome: congenital, Jan. 62
Lp(a): high, therapy of, Sept. 584–585
Lung
  carcinoma, Feb. 123
  collapsed with pleural effusion simulating paracardiac mass, Feb. 103
Lymphangiosarcoma: of heart, echocardiography of, Feb. 119
Lymphoma: of heart, treatment, Feb. 122

M

Magnetic resonance imaging
  of bronchogenic carcinoma, Feb. 100
  contrast-enhanced, for heart tumor detection, Feb. 97
  of heart tumors, Feb. 94–102
  of hernia, hiatal, Feb. 95
  of lipoma of interatrial septum, Feb. 96
  of pericardial cyst, Feb. 98
  of pericardial fibrosarcoma, Feb. 99
  of pericardial metastases of gastric adenocarcinoma, Feb. 101
Massage: carotid sinus, in near syncope, Apr. 242
Maze procedure, July 447
Medtronic Hall valve, May 276, June 341–342
Meiosis: and DNAS replication, Jan. 28–31
Mesothelioma: of heart, treatment, Feb. 121–122
Metastases
  of heart tumors, secondary, Feb. 124–125
  pericardial
    CT of, Feb. 92
    of cystadenocarcinoma, Feb. 86
    of gastric adenocarcinoma, Feb. 101
Methylxanthines: in vasodepressor syncope, Apr. 226–227
Microwave catheter ablation: in tachycardia, July 437–438
Micturition: syncope after, Apr. 234
Migraine: syncopal, Apr. 234–235
Mirsky method: in isovolumic relaxation constant, Dec. 803
Mitochondrial cardiomyopathy, Jan. 61–62
Mitosis: and DNA replication, Jan. 28–31
Mitral
  fibrosarcoma, echocardiography of, Feb. 120–121
  inflow pattern
    atrial contraction and, prematurely placed, Dec. 823
    elevated filling pressure and, Dec. 822–823
    heart rate increase and, Dec. 824
    normal, determinants of, Dec. 819–820
    ventricular relaxation abnormalities in, early, Dec. 820–822
  prosthetic valve
    Björk-Shiley, May 285

Mitral *(cont.)*
echocardiography of, May 286–291, 298–299
echocardiography of, transesophageal, May 296–297
stenosis in prosthetic valve, May 284
valve
disease in aged, Oct. 649–651
myxoma, echocardiography of, Feb. 106
prolapse and sudden cardiac death, Nov. 708–709
MitroFlow valve, June 350–351
Molecular biology, Jan. 9–72
historical perspective
modern molecular biology, Jan. 11–14
role of cardiologist and, Jan. 9–22
modern, important dates in, Jan. 13
techniques of, Jan. 37–51
application to cardiomyopathy, Jan. 57–63
unique features of, Jan. 14
Molecular genetics, Jan. 19–21
concepts of, Jan. 51–57
methods of, Jan. 51–57
techniques of, Jan. 37–51
application to cardiomyopathy, Jan. 57–63
Monitoring
blood pressure, in rehabilitation activity, Mar. 196, 197
ECG (*see* Electrocardiography, monitoring)
rehabilitation, Mar. 170
protocol for, Mar. 169
Mortality
in beta-blocker trials by age, Oct. 636–637
coronary artery bypass, Oct. 642
coronary heart disease, and cholesterol, Sept. 554
in heart failure, progressive, Nov. 707
Kaplan-Meier rate, Nov. 754
myocardial infarction, and nitroprusside, Aug. 499
in thrombolytic trials by age, Oct. 635
(*See also* Death)
Murgo method: in isovolumic relaxation constant, Dec. 802
Muscle: dystrophy (*see* Dystrophy, muscular)
Musculoskeletal handicap: and rehabilitation, Mar. 188–189
Mutagenesis: site-directed, in transgenic animals, Jan. 50–51
Mutation analysis, Jan. 56–57
Myocardial infarction
acute
left ventricular remodeling in, prevention with nitroglycerin, Aug. 533–535
nitrates in, Aug. 532–535
nitrates in, organic, Aug. 535
nitroglycerin in, Aug. 535
in aged, Oct. 633–639
exercise test for prognosis after, Mar. 161–162
mortality
and nitroprusside, Aug. 499
reduction and nitrates, Aug. 534
Q waves of, Mar. 160
size reduction and nitrates, Aug. 534
Myocardium
hypertrophy in heart failure, diastolic, Dec. 809
infiltrative disorders, heart failure in, diastolic, Dec. 813
ischemia
heart failure in, diastolic, Dec. 811–812
silent, nitrates in, Aug. 531–532
oxygen consumption
after nitroglycerin, Aug. 501
and nitrates, Aug. 504–505
oxygen uptake decrease in, in exercise training, Mar. 165–166
relaxation, Dec. 795
stiffness
assessment with hemodynamic measures, Dec. 832
increase, disorders with, Dec. 813–814

measures of, Dec. 808–809
Myotonic muscular dystrophy, Jan. 60–61
Myxoma
atrial
angiography of, digital subtraction, Feb. 89
arteriography of, coronary, Feb. 88
echocardiography of, M-mode, Feb. 109
echocardiography of, transesophageal, Feb. 110
photograph of, composite, Feb. 107
ultrasound of, Doppler, Feb. 109
of heart, Feb. 105–112
hemorrhagic, echocardiography of, transesophageal, Feb. 108
mitral valve, echocardiography of, Feb. 106

N

Neomycin: in hypercholesterolemia, Sept. 575–576
Nervous system: sympathetic, and nitrates, Aug. 504
Neurologic
syncope, Apr. 235–237
testing in syncope, Apr. 244
Nicotinic acid: in hypercholesterolemia, Sept. 567–569
Nitrates, Aug. 487–542
action and left ventricular dysfunction, Aug. 511
action mechanisms
basic, Aug. 489–500
vasodilation, central, Aug. 506–511
vasodilation, coronary, Aug. 506–511
vasodilation, peripheral, Aug. 500–505
adverse reactions to, Aug. 514–516
in angina
pectoris, Aug. 500, Aug. 506
stable (*see* Angina, stable, nitrates in)
unstable (*see* Angina, unstable, nitrates in)
antiplatelet activity, Aug. 498–500
available formulations, Aug. 520–526
combination, in stable angina, Aug. 525–526
endothelial function, Aug. 492–496
in heart disease, ischemic, Aug. 527–535
heart failure and, congestive, Aug. 504
intravenous, Aug. 526
long-acting, Aug. 523
how to use, Aug. 524–525
metabolism
effects of confounding variables on, Aug. 514
intracellular, Aug. 489–492
in myocardial infarction, acute, Aug. 532–535
in myocardial ischemia, silent, Aug. 531–532
myocardial oxygen consumption and, Aug. 504–505
oral, Aug. 523
organic
dosing guidelines, Aug. 521
in myocardial infarction, acute, Aug. 535
nitroglycerin and, Aug. 497–498
pharmacokinetics, Aug. 521
vasodilatory actions of, Aug. 502
pharmacology and pharmacokinetics, Aug. 511–514
rapid-acting, Aug. 521–522
short-acting, Aug. 521–522
how to use, Aug. 522–523
side effects of, Aug. 514–516
sympathetic nervous system and, Aug. 504
tolerance, Aug. 516–520
avoidance of, Aug. 518–520
dosage factors that influence, Aug. 520
mechanisms of, Aug. 516–518
proposed mechanisms, Aug. 517
topical, Aug. 523–524

Nitroglycerin
arterial pressure after, Aug. 503
cellular actions, Aug. 490
in coronary atherosclerotic stenosis, Aug. 507
in left ventricular remodeling prevention in myocardial infarction, Aug. 533–535
left ventricular volume after, Aug. 505
in myocardial infarction, acute, Aug. 535
myocardial oxygen consumption after, Aug. 501
nitrates and, organic, Aug. 497–498
ointment, Aug. 523–524
patch, Aug. 524
intermittent, to avoid tolerance in angina pectoris, Aug. 520
pharmacology and pharmacokinetics, Aug. 511–512
Nitroprusside: in myocardial infarction mortality, Aug. 499
Nitrovasodilators, Aug. 491
cellular actions, Aug. 490
Northern blotting, Jan. 41–44
Nucleic acid
four nucleic acids, structural formulas, Jan. 25
probe, development of, Jan. 41
synthesis
cellular architecture, basic, Jan. 22–23
essentials of, Jan. 22–34

O

OmniScience valve, June 342, May 276, 343
Orthostatic syncope (*see* Syncope, orthostatic)
Osteosarcoma: of heart, treatment, Feb. 120
Ovarian cystadenocarcinoma: pericardial metastases of, Feb. 86
Oxygen
consumption, myocardial
after nitroglycerin, Aug. 501
and nitrates, Aug. 504–505
uptake
maximum, in exercise training, Mar. 165
myocardial, decrease in exercise training, Mar. 165–166

P

Pacemaker
adverse device interactions in, Nov. 755
atrial, in syncope, Apr. 216
implant in aged, Oct. 669–670
Pacing: in vasodepressor syncope, Apr. 227–228
Pericardial
constraint, heart failure and, diastolic, Dec. 814
cyst
MRI of, Feb. 98
treatment, Feb. 112–114
disease, malignant, treatment, Feb. 126–128
fibrosarcoma, MRI of, Feb. 99
metastases
CT of, Feb. 92
of cystadenocarcinoma, Feb. 86
of gastric adenocarcinoma, MRI of, Feb. 101
restraint, Dec. 799
Peripheral vascular disease
coronary artery disease in, Oct. 674
rehabilitation and, Mar. 193
Phonocardiography
with echocardiography in heart failure, diastolic, Dec. 826
of heart tumors, Feb. 84
Plasminogen activator: rt-, structure of, Jan. 17
Platelet interactions: with endothelium, Aug. 494–495
Pleural effusion: echocardiography of, Feb. 103
Polymerase chain reaction, Jan. 18, 48–50
Polymorphisms: restriction fragment length, Jan. 52
Postmicturition syncope, Apr. 234
Probe: nucleic acid, development of, Jan. 41

Probucol: in hypercholesterolemia, Sept. 574–575
Prosthetic valve, May 271–325
biological, May 273
Björk-Shiley, mitral, May 285
complications, May 277–282
biological, May 277–280
mechanical, May 280–282
echocardiography of, May 282–325
aortic, May 291–293, 299–301
Doppler, aortic, May 291–293
Doppler, catheter, in mitral stenosis, May 284
Doppler, guidelines for, May 312–314
in endocarditis, infective, May 303–307
intraoperative, May 307–312
mitral, May 298–299
mitral, Doppler values, May 287
pulmonic, May 294–295
regurgitation, May 301–303
stenosis, May 295–301
transesophageal, aortic, May 308
transesophageal, Björk-Shiley mitral, May 285
transesophageal, mitral, May 296–297, 304, 306
tricuspid, May 294
Hancock, May 274, 284
mechanical, May 273–277
Medtronic-Hall, May 276, June 341–342
OmniScience, May 276
performance *(see below)*
St. Jude Medical, May 277, 300
Starr-Edwards, May 275
TEE examination, May 314
types of, May 272–277
listing of, May 272
Prosthetic valve performance, June 335–406
background, June 335
bleeding after valve, June 370–371
rates, June 383–386
comparative performance, summary of, June 381–382
complications
aortic, June 358, 359
double valve, June 362
mitral, June 360, 361
reviewed, June 354–356
valve-related, relative, June 382–383
design of study, June 351–357
embolism after valve, June 368–369
rates, June 373–374, 377–380
failure
biological valve, June 383–385
structural, June 358–366
structural, reported by manufacturers, June 357
follow-up, long-term, June 335–406
future developments, June 388–391
infection after valve, June 371
rates, June 387–390
leak, June 366–367
rates, June 369–372
matching, valve-patient, June 385–388
material grouped by class, model and position, June 355
material of study, clinical, June 351–357
randomized studies
conclusions from, June 378–381
overview of, June 371–381
reports, review of, June 373–378
results, reported, comparison of, June 357–371
series used, reported, June 353–354
statistical methods, June 356–357
thromboembolism rates after valves, June 375, 376
thrombosis after valve, June 369–370
rates, June 381, 382
valve models for study, selection of, June 351–353
valves
bileaflet, June 342–345
bileaflet, St. Jude, June 342–345

Prosthetic valve performance *(cont.)*
biological, June 345–350
biological, failure, June 365–366, 383–385
biological, future developments, June 388–389
biological, usage per year, approximate, June 353
caged-ball, June 337–338
caged-ball, Starr-Edwards, June 337–338
description of, June 336–350
disc, June 338–342
disc, OmniScience, June 342, 343
disk, Björk-Shiley, June 338–341
mechanical, June 337–345
mechanical, failure, June 361–364
mechanical, future developments, June 390–391
mechanical, usage per year, approximate, June 352
pericardial, June 348–350
pericardial, aortic failure, June 366
pericardial, Carpentier-Edwards, June 350
pericardial, double valves, failure, June 368
pericardial, Ionescu-Shiley, June 348–349
pericardial, mitral, failure, June 367
pericardial, MitroFlow, June 350
porcine, June 345–348
porcine, aortic, failure, June 363
porcine, Carpentier-Edwards, June 346–348
porcine, double valves, failure, June 365
porcine, Hancock, June 345–346
porcine, mitral, failure, June 364
selected for review, June 336
Protein synthesis
cellular architecture, basic, Jan. 22–23
discussion of, Jan. 31–34
essentials of, Jan. 22–34
regulation of, Jan. 35
synopsis of, Jan. 29
II, Jan. 32
PTCA
in aged, Oct. 639–641
exercise testing and, Mar. 163
Pulmonary
embolism in aged, Oct. 671–672
heart disease in aged, Oct. 672
prosthetic valve, echocardiography of, May 294–295
vein flow pattern, Dec. 829
Purinergic agonists: in tachycardia, July 425–427

Q

Q waves: of myocardial infarction, Mar. 160
QRS tachycardia, Mar. 192
QT
prolonged, in ventricular tachycardia, Apr. 220
syndrome, long congenital, Jan. 62

R

R wave changes: during exercise test, Mar. 160–161
Radiofrequency in tachycardia ablation (*see* Tachycardia, ablation in, radiofrequency)
Radiography
chest, of heart tumors, Feb. 85–86
in heart failure, diastolic, Dec. 815
Radionuclide techniques: in heart failure, diastolic, Dec. 829–831
Raff and Glantz model: in isovolumic relaxation constant, Dec. 802–803
Reflex syncope, Apr. 231–232
treatment, Apr. 232

Regurgitation: prosthetic valve, echocardiography of, May 301–303
Rehabilitation, Mar. 147–203
activity classification, Mar. 195–198
of aged, Mar. 194–195
in arrhythmia, ventricular, Mar. 190–193
in beta blockade, Mar. 187–188
blood pressure and, high, Mar. 183–184
classes A through E, Mar. 195–198
comprehensive, Mar. 148–149
in coronary heart disease in aged, Oct. 644–645
counseling in, Mar. 184–185
current status of, Mar. 147–203
in diabetes, Mar. 193–194
disability in, functional classification, Mar. 163
education of family and patient in, Mar. 184–185
exercise testing in (*see* Exercise testing)
in heart failure, Mar. 189–190
lipid control (*see* Lipid control)
monitoring in, Mar. 170
ECG, Mar. 169–171
protocol for, Mar. 169
musculoskeletal handicap and, Mar. 188–189
in peripheral vascular disease, Mar. 193
psychological aspects, Mar. 185
smoking and, Mar. 182–183
vocational aspects of, Mar. 185–187
Resuscitation: cardiopulmonary, and sudden cardiac death, Nov. 739–741
Revascularization: in sudden cardiac death survivors, Nov. 748–750
Rhabdomyoma
in child, Feb. 116
of heart, treatment, Feb. 115–117
Rhabdomyosarcoma: of heart, treatment, Feb. 118–120
Rhythm: atrioventricular junction, Mar. 191
rt-PA: structure of, Jan. 17

S

Sarcoma: of heart, treatment, Feb. 118
Serotonin: and coronary atherosclerosis, Aug. 510
Sex: cardiovascular disease risk and, by age, sex and blood pressure in Framingham Study, Oct. 628
Sinoatrial abnormalities: in syncope, Apr. 251–252
Sinus, carotid (*see* Carotid sinus)
Smoking: and rehabilitation, Mar. 182–183
Southern blotting, Jan. 41–44
apparatus for, Jan. 42
hybridization and, Jan. 43
St. Jude valve, May 277, 300, June 342–345
ST segment
abnormal responses to, Mar. 159
changes during exercise test, Mar. 158–159
depression during exercise test, Mar. 159
elevation during exercise test, Mar. 159–160
Q waves and, Mar. 160
Starr-Edwards valve, May 275, June 337–338
Stenosis
aortic, in aged, Oct. 645–648
coronary atherosclerotic
exercise in, Aug. 509
nitroglycerin and, Aug. 507
echocardiography of, May 295–301
mitral, in prosthetic valve, May 284
Structure-function analysis: in vivo, and drug development, Jan. 14–18
Sudden cardiac death, Nov. 699–778
angiocardiography in, radionuclide, Nov. 717–718

Sudden cardiac death *(cont.)*
arrhythmic, unusual causes, Nov. 714
in athletes, Nov. 713
cardiomyopathy
dilated, Nov. 705–707
hypertrophic, Nov. 707–708
cardioverter-defibrillator in, Nov. 750–756
catheterization and, cardiac, Nov. 729
in children, Nov. 712–713
CPR in, Nov. 739–741
drug administration and, Nov. 736
drugs in, electrophysiologically guided, Nov. 741–745
ECG in
recordings, long-term, Nov. 720–722
signal-averaged, Nov. 722–727
echocardiography in, Nov. 717
economics of, Nov. 756–759
electrical abnormalities, Nov. 711–712
electrophysiologic testing in, Nov. 729–734
evaluation, Nov. 714–716
exercise testing in, Nov. 718–720
heart disease, ischemic, Nov. 710–711
heart rate variability in, Nov. 727–729
hypertension, Nov. 709–710
life support and, cardiac, Nov. 739–741
LVH, Nov. 709–710
management, Nov. 734–739
mitral valve prolapse, Nov. 708–709
pathogenesis, schematic representation, Nov. 701
pathophysiology, Nov. 701–704
prevention, Nov. 734–739
risk, relative, Nov. 704–705
special tests, Nov. 716–717
surgery in, Nov. 745–748
surgically treated vs. medically treated, Nov. 740
survivors
revascularization in, Nov. 748–750
treatment, Nov. 741
underlying heart disease in, Nov. 706
ventricular arrhythmia inducibility in, Nov. 732
syncope and, Apr. 238
uncommon, Nov. 713–714
in young adults, Nov. 712–713
Supraventricular
arrhythmia, approach to patients with, July 465–466
tachycardia (*see* Tachycardia, supraventricular)
Sympathetic nervous system: and nitrates, Aug. 504
Syncope, Apr. 211–264
in aged, Apr. 217, 237–238, Oct. 669–670
arrhythmic, Apr. 216–222
bradyarrhythmia, Apr. 216–217
in tachycardia, supraventricular, Apr. 217–218
in tachycardia, ventricular, Apr. 218–222
treatment, Apr. 220–222
atrial fibrillation in, Apr. 218
atrioventricular conduction abnormalities in, Apr. 253
block in, Apr. 254
carotid sinus, Apr. 230–231
treatment, Apr. 231
classification, Apr. 212
combined causes, Apr. 238
cough, Apr. 233
defecation, Apr. 234
diagnosis, differential, Apr. 239
diver's, Apr. 234
ECG in, Apr. 241–243
clues, Apr. 242
monitoring, ambulatory, Apr. 243
signal-averaged, Apr. 244–245
echocardiography in, Apr. 243
electrography in, Apr. 254
electrophysiologic studies in, Apr. 249–256
methodology, Apr. 251

results, Apr. 250
evaluation of, Apr. 239–256
approach to, Apr. 241
exercise testing in, Apr. 244
history, Apr. 239–240
migraine and, Apr. 234–235
near
atrioventricular block in, Apr. 242
pacemaker in, atrial, Apr. 216
neurologic, Apr. 235–237
neurologic testing in, Apr. 244
obstructive, Apr. 213–216
evaluation, Apr. 215
treatment, Apr. 215–216
orthostatic, Apr. 228–230
causes of, Apr. 229
physical examination in, Apr. 240–241
recurrent, Apr. 238
with atrioventricular block, Apr. 217
with hypotension, Apr. 220
pacemaker in, atrial, Apr. 216
ventricular premature depolarizations in, Apr. 220
reflex, Apr. 231–232
treatment, Apr. 232
sinoatrial abnormalities in, Apr. 251–252
sudden death and, Apr. 238
supraventricular tachycardia in, Apr. 253, 255
tilt studies in, Apr. 245–249
blood pressure during, Apr. 248–249
heart rate during, Apr. 248
results, Apr. 246
Valsalva, Apr. 233
vasodepressor, Apr. 222–228
anticholinergic agents in, Apr. 226
beta-adrenergic receptor blockers in, Apr. 225–226
disopyramide in, Apr. 227
methylxanthines in, Apr. 226–227
pacing in, Apr. 227–228
treatment, Apr. 224–228, 230
volume expansion in, Apr. 225
ventricular tachycardia in, Apr. 253–256
vertigo in, Apr. 235

T

T wave changes: during exercise test, Mar. 160
Tachycardia
ablation in, July 428–438
direct current, low-energy, July 431
direct current high-energy, July 429–431
laser catheter, July 436–437
microwave catheter, July 437–438
radiofrequency energy, July 431–436
radiofrequency energy, electrical impedance, July 434
radiofrequency energy, electrode-tissue interface temperature, July 434
radiofrequency energy, factors determining lesion size during, July 433
radiofrequency energy, lesion depth, July 433
radiofrequency energy, typical lesion created by, July 436
atrial, Mar. 192
ECG rhythm strip in, Apr. 217
multifocal, July 464–465
reentrant, mechanism, July 416–417
atrioventricular nodal reentrant
ablation, slow–pathway, July 457
atrioventricular nodal modification in, July 456
catheter ablation for, July 454–457
mechanism, July 417–418
atrioventricular reciprocating
mechanism, July 418–419
recurrent, electrography at accessory pathway ablation, July 459

Tachycardia *(cont.)*
automatic
mechanism, July 419–420
treatment, July 463–465
cardiac glycosides in, July 424–425
digoxin in, July 427
drugs in, July 420–427
class 1, July 421–422
class 2, July 422–423, 427
class 3, July 423–424, 427
class 4, July 424, 427
class 1A, July 427
class 1C, July 427
selection of, general approach, July 426–427
junctional ectopic, July 464
purinergic agonists in, July 425–427
QRS, Mar. 192
supraventricular, July 415–477
drugs in, by class, July 420
during exercise, Apr. 219
paroxysmal, ablation, surgical, July 463
paroxysmal, adenosine in, July 452
paroxysmal, antiarrhythmics in, July 451
paroxysmal, catheter ablation complications, July 462–463
paroxysmal, catheter ablation of accessory pathways, July 457–463
paroxysmal, clinical features, July 449–450
paroxysmal, management, clinical, July 463
paroxysmal, prophylaxis of, chronic, July 453–454
paroxysmal, termination of, acute, July 450–453
paroxysmal, treatment, July 449–463
reentrant, ECG patterns, July 416
reentrant, reentry pathway, July 416
in syncope, Apr. 253, 255
therapy for, current, July 415–477
supraventricular, in syncope, Apr. 217–218
ventricular
ECG telemetry in, Mar. 191
late potentials in, Nov. 724–725
in syncope, Apr. 218–222, 253–256
with syncope, treatment, Apr. 220–221
with torsades de pointes, Apr. 220
Telemetry: ECG, in ventricular tachycardia, Mar. 191
Thromboembolism: rates after prosthetic valves, June 375, 376
Thrombolytic trials: mortality by age in, Oct. 635
Thrombosis after prosthetic valve, June 369–370
rates, June 381, 382
Thymine: structural formula, Jan. 25
D-Thyroxine: in hypercholesterolemia, Sept. 575–576
Tilt in syncope (*see* Syncope, tilt studies)
Tomography, computed (*see* Computed tomography)
Torsades de pointes: in ventricular tachycardia, Apr. 220
Training, exercise (*see* Exercise training)
Transcription, Jan. 33
Translation, Jan. 33
Transplantation: hyperlipidemia after, Sept. 586–587
Tricuspid prosthetic valve: echocardiography of, May 294
Tumor, heart (*see* Heart tumors)

U

U wave: changes during exercise test, Mar. 160–161
Ultrasound: Doppler, of atrial myxoma, Feb. 109
Uterus: leiomyosarcoma, echocardiography of, Feb. 124

V

Valsalva syncope, Apr. 233
Valve
  disease in aged, Oct. 645–651
  prosthetic (*see* Prosthetic valve)
Vasodepressor syncope (*see* Syncope, vasodepressor)
Vasodilatation
  central, and nitrate action mechanisms, Aug. 506–511
  coronary, and nitrate action mechanisms, Aug. 506–511
  peripheral, Aug. 500–505
Vasodilators
  endothelium independent, Aug. 497–498
  nitrovasodilators, Aug. 491
    cellular actions, Aug. 490
Vasodilatory actions: of nitrates, organic, Aug. 502
Ventricle
  arrhythmia (*see* Arrhythmia, ventricular)
  diastole
    physiology of, Dec. 789–794
    rapid filling, Dec. 791–793
  left
    chamber stiffness, assessment, Dec. 803–807
    chamber stiffness, assessment with hemodynamic measures, Dec. 832
    chamber stiffness, measures of, Dec. 805–807
    chamber stiffness, modulus of, Dec. 807
    diastole, mechanical factors that affect, Dec. 794–799
    diastolic dysfunction, spectrum of, Dec. 788
    diastolic failure, conditions associated with, Dec. 810
    diastolic failure, management principles, Dec. 834
    diastolic function, atrial pressure and, Dec. 792
    diastolic function, invasive index of, Dec. 817
    diastolic function, invasive indexes of, normal reference values, Dec. 834
    diastolic function, measurement of, Dec. 800–809
    diastolic function, noninvasive indexes of, Dec. 816
    diastolic pressure volume relationship, Dec. 805
    diastolic pressures, interaction with right ventricle, Dec. 798–799
    diastolic volume after nitroglycerin, Aug. 505
    dysfunction and nitrate action, Aug. 511
    elastic properties, glossary of terms related to, Dec. 796
    elastic recoil, Dec. 796
    filling, atrial contribution to, Dec. 794
    filling, contribution of early diastolic filling and atrial contraction to, Oct. 620
    filling, rate, assessment with hemodynamic measures, Dec. 832
    filling, rate, echocardiography in, Dec. 826–827
    hypertrophy, hypertension and, Nov. 709–710
    intrathoracic pressure and, Dec. 799
    morphology, echocardiography in, Dec. 817
    muscle stiffness assessment, Dec. 808–809
    P-V loop, Dec. 804–805
    passive properties, Dec. 796–798
    pressure decay during isovolumic relaxation period, Dec. 801
    pressure-volume relationship, determinants of, Dec. 806
    rapid filling, factors affecting, Dec. 793
    relaxation, active, assessment of, Dec. 800–803

Ventricle *(cont.)*
relaxation, factors that impair, Dec. 791
remodeling in myocardial infarction, prevention with nitroglycerin, Aug. 533, 534–535
systolic function, Dec. 818
time-activity curve over, radionuclide angiography of, Dec. 831
wall, posterior, movement of, Dec. 829
premature depolarizations in syncope, Apr. 220
right, left ventricle diastolic pressures and, Dec. 798–799
tachycardia, ECG telemetry in, Mar. 191
Verapamil: in relaxation impairment, Dec. 833
Vertigo: and syncope, Apr. 235
Vessels: peripheral, disease, coronary artery disease in, Oct. 674
Vocational aspects: of rehabilitation, Mar. 185–187

W

Weiss method: for isovolumic relaxation constant, Dec. 800–802

X

X-linked cardiomyopathy, Jan. 62–63